AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-19 (Cancelled).

Claim 20 (Currently Amended): A method comprising:

controlling an implantable neurostimulator to deliver neurostimulation to a patient according to a plurality of stimulation settings during a programming session;

displaying a list of the stimulation settings; ~~and~~

collecting information for each of the stimulation settings, wherein the information comprises:

rating information comprising:

a numeric rating for the stimulation setting;

a degree of overlap between a paresthesia map for the stimulation setting and a pain map;

a threshold amplitude value for the stimulation setting; and

ordering the list according to at least one user-chosen criteria selected from the collected information.

Claim 21 (Previously Presented): The method of claim 20, wherein each of the stimulation settings includes a pulse width, a pulse frequency, an identification of activated electrodes and an identification of polarities of activated electrodes.

Claim 22 (Cancelled).

Claim 23 (Currently Amended): The method of claim 20 ~~22~~, wherein ~~collecting rating information comprises collecting a numeric rating for each of the stimulation settings,~~ the user-chosen criteria comprises the numeric ratings, and ordering the list comprises ordering the list according to the numeric ratings.

Claim 24 (Currently Amended): The method of claim 20 ~~23~~, wherein the numeric ratings indicate a degree of pain-relief.

Claim 25 (Currently Amended): The method of claim 20 ~~22~~, ~~wherein collecting rating information comprises:~~
~~collecting a pain map;~~
~~collecting a paresthesia map for each of the stimulation settings; and~~
~~comparing each of the paresthesia maps to the pain map to the to determine a degree of overlap for each of stimulation settings, and~~ wherein the user-chosen criteria comprises the degrees of overlap and ordering the list comprises ordering the list according to the degrees of overlap.

Claim 26 (Currently Amended): The method of claim 20 ~~22~~, wherein collecting rating information comprises collecting rating information from the patient.

Claim 27 (Previously Presented): The method of claim 20, further comprising selecting at least one stimulation setting from the plurality for retesting based on the user-chosen criteria.

Claim 28 (Previously Presented): The method of claim 20, further comprising automatically programming the neurostimulator with at least one of the stimulation settings based on the user-chosen criteria.

Claim 29 (Currently Amended): A device for programming an implantable neurostimulator comprising a display, wherein the device is adapted to control-s an-the implantable neurostimulator to deliver neurostimulation to a patient according to a plurality of stimulation settings during a programming session, display[[s]] a list of the stimulation settings via the display, collect information for each of the stimulation settings, receive input from a user choosing at least one criteria selected from the collected information, and order[[s]] the list according to the at least one user-chosen criteria, wherein the collected information comprises:

> rating information comprising:

>> a numeric rating for each of the stimulation settings; and

>> a degree of overlap between a paresthesia map for the stimulation setting and a

> pain map; and

> a threshold amplitude value for the stimulation setting.

Claim 30 (Previously Presented): The device of claim 29, wherein each of the stimulation settings includes a pulse width, a pulse frequency, an identification of activated electrodes and an identification of polarities of activated electrodes.

Claim 31 (Cancelled).

Claim 32 (Currently Amended): The device of claim 29 31, wherein the device collects a numeric rating for each of the stimulation settings, the user-chosen criteria comprises the numeric ratings, and the device orders the list according to the numeric ratings.

Claim 33 (Currently Amended): The device of claim 29 32, wherein the numeric rating[[s]] indicates a degree of pain-relief.

Claim 34 (Currently Amended): The device of claim 29 32, wherein the display is a touch screen display, and the device collects the numeric rating via the display.

Claim 35 (Currently Amended): The device of claim 29 ~~31~~, wherein the display is a touch screen display, and ~~the device collects a pain map and collects a paresthesia map for each of the stimulation settings via the display and compares each of the paresthesia maps to the pain map to determine a degree of overlap for each of stimulation settings, and~~

wherein the user-chosen criteria comprises the degrees of overlap, and the device orders the list according to the degrees of overlap.

Claim 36 (Previously Presented): The device of claim 29, wherein the device selects at least one stimulation setting from the plurality for retesting based on the user-chosen criteria.

Claim 37 (Currently Amended): The device of claim 29, wherein the device is adapted to automatically program[[s]] the neurostimulator with at least one of the stimulation settings based on the user-chosen criteria.

Claim 38 (Previously Presented): The device of claim 29, wherein the device comprises a portable computer.

Claim 39 (Previously Presented): The device of claim 29, wherein the device comprises a tablet computer.

Claim 40 (Currently Amended): A system for programming an implantable neurostimulator comprising:

means for controlling ~~an~~ the implantable neurostimulator to deliver neurostimulation to a patient according to a plurality of stimulation settings during a programming session;

means for displaying a list of the stimulation settings; ~~and~~

means for collecting information for each of the stimulation settings, wherein the information comprises:

rating information comprising:

a numeric rating for the stimulation setting; and

a degree of overlap between a paresthesia map for the stimulation setting and a pain map;

a threshold amplitude value for the stimulation setting; and

means for ordering the list according to at least one user-chosen criteria selected from the collected information.

Claim 41 (Cancelled).

Claim 42 (Currently Amended): The system of claim 40 ~~41~~, wherein ~~means for collecting rating information comprises means for collecting a numeric rating for each of the stimulation settings,~~ the user-chosen criteria comprises the rating information, and means for ordering the list comprises means for ordering the list according to the numeric ratings.

Claim 43 (Currently Amended): The system of claim 40 ~~41~~, wherein ~~means for collecting rating information comprises:~~

~~means for collecting a pain map and for collecting a paresthesia map for each of the stimulation settings; and~~

~~means for comparing the pain map to the each of the paresthesia maps to determine a degree of overlap for each of stimulation settings, and wherein~~ the user-chosen criteria comprises the degrees of overlap, and means for ordering the list comprises means for ordering the list according to the degrees of overlap.

Claim 44 (Previously Presented): The system of claim 40, further comprising means for selecting at least one stimulation setting from the plurality for retesting based on the user-chosen criteria.

Claim 45 (Previously Presented): The system of claim 40, further comprising means for automatically programming the neurostimulator with at least one of the stimulation settings based on the user-chosen criteria.

Claims 46-59 (Cancelled).

Claim 60 (Previously Presented): The method of claim 20, wherein controlling the implantable neurostimulator to deliver neurostimulation to the patient according to the plurality of stimulation settings during the programming session comprises:

> storing a plurality of predetermined programming codes;
>
> identifying a type of an implantable neurostimulator;
>
> selecting one of the plurality of programming codes based on the identified type; and
>
> transmitting the selected programming code to the implantable neurostimulator to enable

programming of the implantable neurostimulator.

Claim 61 (Previously Presented): The method of claim 60, wherein transmitting the selected programming code comprises modulating a carrier signal.

Claim 62 (Previously Presented): The method of claim 61, further comprising retrieving parameters for modulation of the carrier signal from a memory based on the identified type of the implantable neurostimulator.

Claim 63 (Previously Presented): The method of claim 20, further comprising receiving input from the patient indicative of a stimulation amplitude of the neurostimulation, wherein controlling the implantable neurostimulator to deliver neurostimulation to the patient comprises controlling the implantable neurostimulator to deliver neurostimulation to the patient at the stimulation amplitude indicated by the user.

Claim 64 (Currently Amended): The method of claim 20, further comprising determining [[a]] the threshold amplitude value for each of the stimulation settings.

Claim 65 (Currently Amended): The method of claim 20 64, wherein ~~determining~~ collecting the threshold amplitude value for each of the stimulation settings comprises determining at least one of a perceptual threshold, a usage threshold, an area of interest threshold, a motor threshold or a discomfort threshold for each of the stimulation settings.

Claim 66 (Currently Amended): The method of claim 20 64, further comprising, for each stimulation setting, determining whether the rating information falls within boundaries based on the threshold amplitude value.

Claim 67 (Cancelled).

Claim 68 (Currently Amended): The method of claim 20, further comprising:
~~collecting information during the programming session; and~~
providing the collected information to at least one of a server or a database.

Claim 69 (Currently Amended): The device of claim 29, wherein the device further comprises:

an antenna that identifies a type of the implantable neurostimulator; and

a transmitter interface that includes a memory to store a plurality of predetermined programming codes, wherein the transmitter interface is adapted to receive[[s]] an indication of the identified type of the implantable neurostimulator from the computing device, select[[s]] one of the plurality of programming codes based on the identified type, and transmit[[s]] the selected programming code to the implantable neurostimulator via the antenna to enable programming of the implantable neurostimulator to deliver neurostimulation to the patient.

Claim 70 (Previously Presented): The device of claim 69, wherein the transmitter interface transmits the selected programming code by modulating a carrier wave.

Claim 71 (Previously Presented): The device of claim 70, wherein the memory stores parameters for modulation of the carrier wave associated with each of the programming codes, and the transmitter interface further includes control interface circuitry that retrieves parameters from the memory based on the identified type of the implantable neurostimulator and controls modulation of the carrier wave according to the retrieved parameters.

Claim 72 (Previously Presented): The device of claim 70, wherein the transmitter interface includes at least one of a direct digital synthesizer, programmable gain/amplitude circuitry or a transistor circuit to modulate the carrier wave.

Claim 73 (Previously Presented): The device of claim 29, wherein the device presents an amplitude adjustment screen and receives input from the user adjusting a stimulation amplitude of the neurostimulation via the amplitude adjustment screen.

Claim 74 (Currently Amended): The device of claim 29, wherein the device determines [[a]] the threshold amplitude value for each of the stimulation settings.

Claim 75 (Currently Amended): The device of claim 29, wherein the device ~~collects information during the programming session, and~~ provides the collected information to at least one of a server or a database.

Claim 76 (Currently Amended): The system of claim 40, further comprising[[:]]

> ~~means for collecting information during the programming session; and~~
>
> means for providing the collected information to at least one of a server or a database.